

Amendments to the Claims:

The listing of claims below will replace all prior versions and listings of claims in this application.

Listing of Claims:

Please amend the claims as follows:

1. (Currently Amended) A computer-implemented method comprising:

decoding, by the computer, a first slice of a first frame of a video by performing a submethod comprising:

determining, in accordance with a slice header of the first slice, that the first slice has a decoding dependency on a second slice of a second frame of the video;

determining that said second slice has not been decoded;

suspending decoding the first slice for a first predetermined amount of time;

then

determining that said second slice has been decoded; and

transforming said first slice from an encoded state to a decoded state; and

decoding, by the computer, [[a]] said second slice of a second frame of the video;
wherein said first and second slices each comprise a plurality of ~~non-sequential~~
macroblocks that are respectively selected from said first and second frames of the video; ~~and~~
~~wherein some of said decoding a second slice of a second frame of the video is~~
~~contemporaneous with said decoding a first slice of a first frame of a video.~~

2-6. (canceled)

7. (previously presented) The method of claim 1, wherein the first and the second frame are the same frame.

8-10. (Canceled)

11. (Currently Amended) ~~An article of manufacture comprising:~~

~~storage medium; and~~

~~a plurality of programming instructions stored on said storage medium, the programming instructions designed to enable an apparatus to~~

A computer readable medium containing computer executable instructions that when executed by a processor, perform a method comprising:

decode a first slice of a first frame of a video by performing a submethod comprising:

determining, in accordance with a slice header of the first slice, that the first slice has a decoding dependency on a second slice;

determining that said second slice has not been decoded;

suspending decoding the first slice for a first predetermined amount of time;

then

determining that said second slice has been decoded; and

transforming said first slice from an encoded state to a decoded state;

decode a second slice of a second frame of the video; and

render said decoded first and second slices;

wherein said first and second slices each comprise a plurality of ~~non-sequential~~ macroblocks that are respectively selected from said first and second frames of the video;

~~and wherein some of said decoding a second slice of a second frame of the video is contemporaneous with said decoding a first slice of a first frame of a video.~~

12-14. (canceled)

15. (Currently Amended) An apparatus comprising:

a buffer to store frames of a video;

a first decoding unit coupled to the buffer to decode a first slice of a first frame of the video by performing a method comprising:

determining, in accordance with a slice header of the first slice, that the first slice has a decoding dependency on a second slice;

determining that said second slice has not been decoded;

suspending decoding the first slice for a first predetermined amount of time;

then

determining that said second slice has been decoded; and

transforming said first slice from an encoded state to a decoded state; and

a second decoding unit to decode a second slice of a second frame of the video;

wherein said first and second slices each comprise a plurality of ~~non-sequential~~ macroblocks that are respectively selected from said first and second frames of the video; ~~and~~

~~wherein some of said decoding a second slice of a second frame of the video is contemporaneous with said decoding a first slice of a first frame of a video.~~

16-20. (canceled)

21. (original) The apparatus of claim 15, wherein the apparatus is an ASIC comprising said first and second decoding units.

22. (original) The apparatus of claim 15, wherein the apparatus is a circuit board comprising an ASIC having at least one of said first and second decoding units.

23. (original) The apparatus of claim 22, wherein the apparatus is a selected one of a palm sized computing device, a wireless mobile phone, a digital personal assistant, a set-top box, a digital versatile disk player, a television, and a display monitor.

24. (original) The apparatus of claim 15, wherein

the first and second decoding units comprise first and second threads of programming instructions designed to perform said first and second decoding respectively; and

the apparatus further comprises one or more memory units to store the programming instructions, and at least one processor coupled to the one or more memory units to execute the first and second threads of programming instructions.

25. (original) The apparatus of claim 24, wherein the apparatus is a selected one of a palm sized computing device, a wireless mobile phone, a digital personal assistant, a laptop computing device, a desktop computing device, a set-top box, a server, a digital versatile disk player, a television, and a display monitor.

26. (Currently Amended) A system comprising:

a video provider to provide an encoded video; and

a video renderer coupled to the video provider to receive the encoded video, decode the received video, and render the decoded video, including

a first decoding unit to decode a first slice of a first frame of the video by performing a method comprising:

determining, in accordance with a slice header of the first slice, that the first slice has a decoding dependency on a second slice;

determining that said second slice has not been decoded;

suspending decoding the first slice for a first predetermined amount of time;
then
determining that said second slice has been decoded; and
transforming said first slice from an encoded state to a decoded state, and
a second decoding to decode a second slice of a second frame of the video;
wherein said first and second slices each comprise a plurality of non-sequential
macroblocks that are respectively selected from said first and second frames of the video; ~~and~~
~~wherein some of said decoding a second slice of a second frame of the video is~~
~~contemporaneous with said decoding a first slice of a first frame of a video.~~

27-29, (canceled)

30. (new) The method of claim 1, wherein said submethod further comprises:

determining after said first predetermined amount of time that said second slice has
not been decoded; then

suspending decoding the first slice for a second predetermined amount of time, said
second predetermined amount of time being shorter than said first predetermined amount of
time.

31. (new) The method of claim 1, wherein said plurality of macroblocks comprise a plurality
of non-sequential macroblocks.

32. (new) The computer readable medium of claim 11, wherein said submethod further
comprises:

determining after said first predetermined amount of time that said second slice has
not been decoded; then

suspending decoding the first slice for a second predetermined amount of time, said
second predetermined amount of time being shorter than said first predetermined amount of
time.

33. (new) The computer readable medium of claim 11, wherein the first and the second frame
are the same frame.

34. (new) The computer readable medium of claim 11, wherein said plurality of macroblocks
comprise a plurality of non-sequential macroblocks.

35. (new) The apparatus of claim 15, wherein said method further comprises:

determining after said first predetermined amount of time that said second slice has not been decoded; then

suspending decoding the first slice for a second predetermined amount of time, said second predetermined amount of time being shorter than said first predetermined amount of time.

36. (new) The apparatus of claim 15, wherein the first and the second frame are the same frame.

37. (new) The apparatus of claim 15, wherein said plurality of macroblocks comprise a plurality of non-sequential macroblocks.

38. (new) The system of claim 26, wherein said method further comprises:

determining after said first predetermined amount of time that said second slice has not been decoded; then

suspending decoding the first slice for a second predetermined amount of time, said second predetermined amount of time being shorter than said first predetermined amount of time.

39. (new) The method of claim 26, wherein the first and the second frame are the same frame.

40. (new) The method of claim 26, wherein said plurality of macroblocks comprise a plurality of non-sequential macroblocks.